

## Title: METHOD AND CONSTRUCTION FOR VENTILATION OF HYDROGEN GAS

wherein the first metallic layer is joined to the second metallic layer, and said mesh is joined to, and in between, the first and the second metallic layers.

22. A method as claimed in claim 20 wherein a third metallic layer is joined to, and in between, the first and the second metallic layers, and wherein said mesh is joined to, and in between, said second and third metallic layers.

23. Method according to claim 20 wherein the first metallic layer is selected from the group consisting of Fe, steel, Ti, Zr, Nb, Ta and alloys thereof.

24. Method according to claim 20 wherein the mesh is selected from the group consisting of Fe, Ag, Ni, hastelloy, alloys thereof, plastic materials, and ceramics.

25. Method according to claim 20 wherein the mesh apertures are from about 0.5 to about 10 mm.

26. Method according to claim 20 wherein the thickness of the mesh is from about 0.1 to about 5 mm.

27. Method according to claim 20 wherein the mesh is joined by means of explosion bonding, rolling or bolting.

28. Method according to claim 22 wherein a fourth metallic layer is joined to, and in between, the first and the third metallic layers.

29. Construction obtainable by the method according to claim 20.

30. Construction comprising at least two metallic layers wherein a first metallic layer, sensitive to hydrogen embrittlement, is joined to a second metallic layer, and wherein a mesh, providing venting channels between said first and second metallic layers, is joined to, and in between, said first and second metallic layers.

31. Construction according to claim 30, wherein a third metallic layer is joined to, and in between, said first and second metallic layer, and wherein the mesh, is joined to, and in between, the second and the third metallic layers.

32. Construction according to claim 30 wherein a fourth metallic layer is joined to, and in between, the third and the first metallic layers.

33. Construction according to claim 30 wherein the channels formed have a diameter from about 0.01  $\mu\text{m}$  to about 1000  $\mu\text{m}$ .

34. Construction according to claim 30 wherein the first metallic layer is selected from the group consisting of Ti, Zr, Nb, Ta and alloys thereof.

35. Construction according to claim 30 wherein the first, the third, and the second layers form an anode, an intermediate layer, and a cathode providing a bipolar electrode.

36. Construction according to claim 30 wherein the hydrogen permeability is lower in the third layer than in the second layer.

37. Electrochemical cell characterized in that it comprises

an electrode as defined in claim 35.

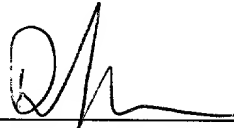
38. Use of an electrochemical cell according to claim 37 for production of alkali metal chlorate, alkali metal hydroxide or hypochlorite.

REMARKS

A new set of claims is presented herewith for examination.

Favorable action is respectfully solicited.

Respectfully submitted,



David J. Serbin  
Reg. No. 30589

Law Office of David J. Serbin  
Unit 2, First Floor  
1423 Powhatan Street  
Alexandria, Virginia 22314  
Telephone: 703-838-2700  
Facsimile: 703-838-2701  
December 21, 2000